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APPROVAL OF UNDP ASSISTANCE TO A PROJECT OF CHINA

IPF:(1992-96) $176 600 000

(CPR/91/230) - Telecommunications Modernization Programme

Date of approval by the AC:[1/]	1 July 1992
Expected duration:	Four years
Proposed executing agency:	Government
Government implementing agency:	CICETE and ITU
Proposed UNDP contribution:	$ 7 500 000
Government cost sharing:	$ 3 000 000
Total UNDP budget:	$10 500 000

DEPT.

Project background

China has proposed a dramatic increase in telecommunication services over the next five years, coinciding with the Eighth Five-Year Plan. However, the lack of capability in rational deployment of its human, physical as well as financial resources and the lack of up-to-date knowledge, skills, expertise, and systems to update the network and services to modern standards hampers the development of the telecommunications sector. In spite of the rapid development enjoyed during the past years, China continues to be one of the countries with the lowest per capita telephone densities. The national program of modernization is guided by a set of policies and objectives.

In the short term these are to: (i) provide more services to more people; and ii) develop a much improved call completion rate; (iii) establish better allocation of capital resources to remove imbalances and generate the best service practicable and a better return on investment; (iv) increase indigenous manufacture at world competitive prices; and (v) promote selected subsectors for increased R&D in light of China's national demand and noting economies of scale. In the medium term China will continue to expand its manufacturing base with a continued joint venture approach; and in the long term it will aim for an information intensive, intelligence intensive economy with hi-tech manufacturing capability for home and for export.

In attempting to provide the essential telecommunications infrastructure needed over the last Five-Year Plan period, the Government encountered a number of difficulties and bottlenecks which have led to the formulation of the program for the current Plan period. Realizing the strategic importance of telecommunications and recognizing that effective planning, through human resource development is the key to success, the Government requested assistance under the present approval.

Description of project

The development objective of the project is to facilitate acceleration of technological and managerial transformation in China's telecommunications sector by enhancing capabilities of formulating medium-term and long-term policies and strategies and of establishing standards, and by introducing a critical mass of vital design, engineering, operational and managerial technology.

[1/] **This Fact Sheet reflects the status of the project/revision at the time it was approved by the Action Committee; modifications to the project/revision may have occurred subsequently.**

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The interlinking theme covering the nine elements (projects) is building capacity to establish standards in various components of a modern telecommunications system, to develop and diffuse regulations, test and verify that the standards are being met, and apply the standards to both domestic and imported equipment. Additionally, in some cases new design capacity will be transmitted to the national manufacturing sector to improve the quality and reliability of locally manufactured equipment. These goals will be achieved in the context of a substantially improved telecommunications systems planning capacity. Management of the government program and UNDP assistance and downstream diffusion of results to users is facilitated since all institutions are administratively under the Ministry of Posts and Telecommunications.

The immediate objectives of the project are to: (a) provide a series of strategic targets, mechanisms, policies, management capacities suited to China; (b) strengthen staff quality and research; (c) improve coordination for the sector by acting as secretariat for Coordination Committee; (d) enhance the know-how of engineers at Planning Research Institute in modern network planning suited to China; (e) establish a pilot radio monitoring station to perform as both the central operating station (model for other stations) and a training station; (f) implement a system of spectrum management in accordance with international standards; (g) strengthen the capability to carry out development of optical fiber commun measurement techniques; (h) improve the design of optical test equipment and prepare blueprints for technology transfer to domestic manufacturing units; (i) provide training and consultations to other institutions and users of optical instrumentation; (j) increase the capability of TMC staff in critical Optical Fiber Communications metrology standards to conduct measurement and calibration; (k) define a set of standards, regulations and calibration procedures as basis for type-approval of instruments (domestic or imported) to be used in China; (l)assist regional metrology sub-stations in setting up counterpart calibration apparatus and increasing knowledge base of staff; (m) upgrade the capability of Hong Qiao experimental earth station to perform function of "test-bed" for alternative configurations for national satellite system; (n) determine key technical parameters of digital satellite communications systems and subsystems; (o) strengthen circuit design and test capability for systems & subsystems; (p) characterize microwave radio propagation conditions in China, as related to high capacity digital microwave communications systems; (q) improve design of existing prototype equipment; (r) undertake personnel capability development; (s) upgrade staff skills in packet switching systems, networks and technology; t) design a packet switched network to effectively serve expected 1995 needs and be expandable for larger future needs; (u) acquire design of packet switching systems and the rights to use, modify and enhance it to meet specific needs of China; (v) increase skills and expertise of staff in ISDN systems and technology; (x) formulate national ISDN technical standards and plan for their implementation; and (y) Verify proposed technical standards and proper interconnections with voice and data.

Inputs

UNDP will provide approximately 75 work-months for international consultants; 510 work-months of training in technical, operational, planning and managerial subjects; equipment for test and demonstration laboratories, test and calibration instruments, computers, and associated software; and miscellaneous costs. External advisors will fall in two groups: those on the central programme advisory level will be telecommunications administrators and those on the component (project) level will be technical specialists.

Financial data

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Personnel	1 238 200
Training	2 901 000
Equipment	2 820 800
Miscellaneous	540 000
Total	7 500 000

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